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EXAMINER

CLARK, ISAAC R

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/921,275

Applicant(s)

CERAMI ET AL.

Examiner

Isaac R. Clark

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/15/04, 04/20/05</u>  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-17 are presented for examination.

#### ***Priority***

2. The applicant claims priority under 35 USC § 119(e) from Provisional Application No. 60/222,791 filed 08/01/2000.

#### ***Response to Amendment***

3. The objections to the specification made in the previous office action are withdrawn based on the Applicants' amendments to the specification.
4. The rejections to claims 2 and 3 made under 35 U.S.C. § 112, second paragraph, are withdrawn based on the Applicants' amendments to claims 2 and 3.
5. With respect to the rejections of claims made in the last office action under 35 U.S.C. § 103, the Applicants make the following arguments in support of their contention that the rejections are inappropriate:
  - a. The cited references, Teglovic et al. (US Patent 5,692,030, "Teglovic") in view of Berg (US Patent 5,872,911) do not teach every element of the claims because they do not teach creating a trouble ticket before a customer reports trouble.
  - b. Teglovic additionally teaches away from creating a trouble ticket before a customer reports trouble.
  - c. The examiner has employed impermissible hindsight because the rationale for combining Teglovic and Berg was found only in the Applicants' specification.

Art Unit: 2154

6. The examiner respectfully traverses each of these arguments.

7. With respect to argument (a), the examiner first points out that the test for obviousness is not whether the features of one reference may be bodily incorporated into the other to produce the claimed subject matter, but simply what the combination of references makes obvious to one of ordinary skill in the art. See *In re Bozek*, 163 USPQ 545 (CCPA 1969).

8. In instant case, Teglovic as the Applicants agree, teaches creating and reporting a trouble ticket after a customer reports trouble (See Applicant's remarks on page 13, second paragraph). Berg teaches predicting potentially affected customers based on a detected fault with the goal being that maintenance efforts can be directed from a perspective of affected customers rather than affected equipment (See Berg, col. 5, lines 37-42). The faults are detected by equipment alarms among other sources and thus do not require a call from a customer (see Berg, col. 1, lines 40-60). One of ordinary skill in the art would recognize that the teaching of Berg would allow creating a trouble ticket as taught by Teglovic for potentially affected customers without waiting for one or more affected customers to call or report the problem.

9. With respect to argument (b), The Applicants point out that while Teglovic teaches creating and reporting a trouble ticket after a customer reports trouble. Teglovic does indeed teaching another or a different way than the invention claimed by the Applicant, but Teglovic is silent about the possibility of creating a trouble ticket prior to receiving a report from a customer. Such silence does not rise to the level of teaching away particularly when the cited art does teach an advantage of such a

Art Unit: 2154

combination. See *In re Borregard*, 439 F.2d 206, 169 USPQ 240 (CCPA 1971). The motivation and advantages discussed in the prior art are addressed further in response to argument (c).

10. With respect to argument (c), Applicants argue that the examiner has provided no motivation to combine the teachings of Teglovic and Berg other than that gleaned impermissibly from the Applicants' specification. In particular, the Applicants suggest that the examiner combined the references because they both references teach detecting and assessing faults in telecommunications networks. While the rejection does contain such language, the cited wording was used to demonstrate that the references were analogous art related to the inventor's field of endeavor or to the problem being addressed by the inventor. It is necessary to refer to the Applicants description in order to make the determination that the cited art was analogous and thus such a reference is not impermissible hindsight.

11. The rejection cited as motivation to combine Berg and Teglovic that the combination would result in a proactive system in which faults would be anticipated thus allowing problems to be addressed before the customer noticed them. Such teaching was provided by Berg (See Berg, Abstract). One of ordinary skill in the art would be motivated to modify the teaching of Teglovic as taught by Berg because he would recognize that satisfied customers were more likely to be retained.

***Claim Rejections - 35 USC § 112***

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2154

13. Claims 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Claims 12, 13, and 15 each recite the limitation "The method of claim 10". There is insufficient antecedent basis for this limitation in the claim because claim 10 is an apparatus claim that does not recite a method.

15. As per claims 14, 16, and 17, these claims are rejected because of their dependencies on claims 12, 13, and 15. If claims 12, 13, and 15 are modified to recite a system, claims 14, 16, and 17 will require appropriate modification as well.

16. For the purpose of examining the claims, claims 12-17 are interpreted as reciting "The system of claim..."

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 2154

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. Claims 1, 4-10, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teglovic et al. (US Patent 5,692,030) hereinafter Teglovic in view of Berg (US Patent 5,872,911).

20. As per claim 1, Teglovic teaches a method for managing a repair process for a fault (col. 1, lines 30-35) between a network repair system and customer service system (col. 2; lines 20-25; Customer Service manager) using a repair ticketing system (col. 2, lines 22-23), the method comprising: detecting the fault in the proactive network repair system (col. 2, line 22; fault reported by customer); sending an indication of the fault to the repair ticketing system and creating a repair ticket (col. 2, line 23-24; technician opens ticket and sends to customer service system);

21. Teglovic fails teach that the repair system is a proactive repair system. Teglovic teaches correlating a repair ticket to one or more customers (col. 2, lines 23-24; trouble ticket reported by customer and logged by technician) but does not explicitly teach correlating the repair ticket with the affected customers before a call is received by one or more customers affected by the fault.

22. Berg teaches a proactive system (Abstract; col. 1, lines 5-20).

23. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Berg and Teglovic to produce a proactive repair system with repair tickets for tracking customer problems because they both deal with detecting and assessing faults in telecommunications networks.

Art Unit: 2154

Furthermore, the teaching of Berg to proactively assess the impact of network faults would allow providing better customer service by allowing service personnel to anticipate the impact to customers (Berg, Abstract).

24. Berg teaches detecting faults and correlating the fault data to predict which customers will be affected by the fault without requiring a customer call (Fig. 1A; col. 5, lines 35-40).

25. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Berg and Teglovic to correlate one or more customers with a repair ticket and to communicate the repair ticket to customer service prior to receiving a call from one or more customers because they both deal with detecting and assessing faults in telecommunications networks. Furthermore, the teaching of Berg to determine the affected customers prior to receiving a customer call would allow service personnel to address faults in a customer oriented view resulting in addressing problems more efficiently from the customers perspective (Berg, Abstract).

26. As per claim 4, Teglovic teaches the method of claim 1, wherein the proactive network repair system comprises a fault management system (col. 3, lines 52-59).

27. Teglovic fails to explicitly teach a network repair system further comprising a proactive repair system, and performance management system.

28. Berg teaches a proactive network repair system further comprising a proactive repair system (col. 7, lines 49-64) and a performance management system (Fig 1. block 102, col. 3, lines 16-30).



Art Unit: 2154

29. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Teglovic and Berg to include a performance management system and a proactive repair system in the network repair system because they both deal with detecting and assessing faults in telecommunications networks. Furthermore, the teaching of Berg to provide a performance management system and a proactive repair system would result in allow the system to detect problems before they became service issues, thus minimizing service disruptions to customers (Berg, col. 7, lines 61-63).

30. As per claim 5, Teglovic teaches the method of claim 4 further comprising communicating the repair ticket to the fault management system (col. 1, lines 30-35) and the proactive repair system (col. col. 6, lines 1-5 and 35-50).

31. Teglovic fails to teach sending the repair ticket to the performance management system.

32. Berg teaches reporting fault information to the performance management system. (col. 3, lines 16-30).

33. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Berg and Teglovic to send the repair ticket to the performance management system because they both deal with detecting and assessing faults in telecommunications networks. Furthermore, the teaching of Berg to send the repair ticket to the performance management system would allow identifying which network elements are in critical need of service based on the potential for the fault to affect service (Berg, col. 7, lines 49-62).

Art Unit: 2154

34. As per claim 6, Teglovic teaches the method of claim 1, further comprising sending an indication that the fault is resolved to the repair ticketing system (col. 8, lines 58-62).

35. As per claim 7, Teglovic teaches the method of claim 6, further comprising closing the repair ticket (col. 6, lines 60-63).

36. As per claim 8, Teglovic teaches the method of claim 7 further comprising communicating the resolution of the resolution of the repair ticket to the customer service system col. 8, lines 58-62 and the proactive network repair system (col. 6, lines 59-64).

37. As per claim 9, Teglovic teaches a method for managing a repair process for a fault (col. 1, lines 30-35) between a fault management system, a repair system, and customer service system (col. 2; lines 20-25; Customer Service manager) using a repair ticketing system (col. 2, lines 22-23), the method comprising: detecting the fault in at least one of the fault management system, proactive repair system, and performance management system (col. 2, line 22; fault reported by customer via the fault management system); sending an indication of the fault to the repair ticketing system; creating a repair ticket; and communicating the repair ticket to the fault management system, and the repair system (col. 2, line 23-24; technician opens ticket and sends to customer service system, transmitted to service system).

38. Teglovic does not explicitly teach that the network repair system is a proactive network repair system and that the proactive network repair system further comprises a proactive repair system and a performance management system. While Teglovic

Art Unit: 2154

teaches correlating a repair ticket to one or more customers (col. 2, lines 23-24; trouble ticket reported by customer and logged by technician), Teglovic does not teach correlating the repair ticket with the affected customers and communicating the repair ticket to the customer service system before a call is received by one or more customers affected by the fault. Teglovic does not teach that the repair ticket is communicated to a performance management system in addition to the fault management and repair systems.

39. Berg teaches a proactive system (Abstract; col. 1, lines 5-20).

40. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Berg and Teglovic to produce a proactive repair system with repair tickets for tracking customer problems because they both deal with detecting and assessing faults in telecommunications networks. Furthermore, the teaching of Berg to proactively assess the impact of network faults would allow providing better customer service by allowing service personnel to anticipate the impact to customers (Berg, Abstract).

41. Berg teaches a proactive network repair system comprising a proactive repair system (col. 7, lines 49-64) and a performance management system (Fig 1. block 102, col. 3, lines 16-30).

42. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Teglovic and Berg to include a performance management system and a proactive repair system in the network repair system because they both deal with detecting and assessing faults in

Art Unit: 2154

telecommunications networks. Furthermore, the teaching of Berg to provide a performance management system and a proactive repair system would result in allow the system to detect problems before they became service issues thus minimizing service disruptions to customers (Berg, col. 7, lines 61-63).

43. Berg teaches detecting faults and correlating the fault data to predict which customers will be affected by the fault without requiring a customer call (Fig. 1A; col. 5, lines 35-40).

44. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Berg and Teglovic to correlate one or more customers with a repair ticket and to communicate the repair ticket to customer service prior to receiving a call from one or more customers because they both deal with detecting and assessing faults in telecommunications networks. Furthermore, the teaching of Berg to determine the affected customers prior to receiving a customer call would allow service personnel to address faults in a customer oriented view resulting in addressing problems more efficiently from the customers perspective (Berg, Abstract)

45. Berg teaches reporting fault information to the performance management system (col. 3, lines 16-30).

46. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Berg and Teglovic to send the repair ticket to the performance management system because they both deal with detecting and assessing faults in telecommunications networks. Furthermore, the teaching of Berg to send the repair ticket to the performance management system would allow

Art Unit: 2154

identifying which network elements are in critical need of service based on the potential for the fault to affect service (Berg, col. 7, lines 49-62).

47. As per claims 10 and 13-17, these claims (as construed) are apparatus claims reciting the same subject matter as claims 1 and 4-8. These claims are rejected for the same reasons as claims 1 and 4-8.

48. Claims 2, 3, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teglovic and Berg as applied to claim 1 above in view of Bhagavath et al. (US Patent 6,374,288) hereinafter Bhagavath.

49. As per claim 2 as construed, Teglovic fails to explicitly teach the method of claim 1, wherein the network comprises a Digital Subscriber Line (xDSL) network.

50. Bhagavath teaches a communications network comprising Digital Subscriber Line (xDSL) network (col. 1, lines 13-20).

51. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Teglovic and Bhagavath to incorporate DSL in the fault administration system of Teglovic because they both deal with managing communications networks. Furthermore, the teaching of Bhagavath to use xDSL in the network would support reliable high-speed broadband access over wires (Bhagavath, col. 1 lines, 15-18).

52. As per claim 3 as construed, Teglovic fails to explicitly teach the method of claim 1, wherein the network comprises a Very high bit rate DSL (VDSL) network.

53. Bhagavath teaches a communications network comprising Very high bit rate DSL (VDSL) network (col. 2, lines 53-61).

Art Unit: 2154

54. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Teglovic and Bhagavath to incorporate VDSL in the fault administration system of Teglovic because they both deal with managing communications networks. Furthermore, the teaching of Bhagavath to use xDSL in the network would support reliable very high speed broadband access over wires for short distances (Bhagavath, col. 2 lines, 54-58).

55. As per claims 11 and 12, these claims (as construed) are apparatus claims reciting the same subject matter as claims 2 and 3. Claims 11 and 12 are rejected for the same reasons as claims 2 and 3.

### ***Conclusion***

56. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

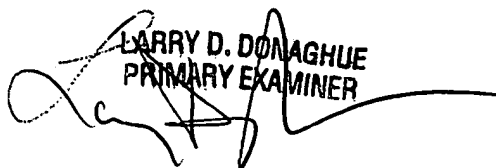
Art Unit: 2154

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac R Clark whose telephone number is (571)272-3961. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (571)272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IRC

  
LARRY D. DONAGHUE  
PRIMARY EXAMINER